CALFED BAY-DELTA PROGRAM

Office Memorandum

Date: April 23, 1997

To: CALFED Environmental Impact Analysis Team Members

From: Ray McDowell

Subject: Examples of Appropriate Level of Detail from CVPIA PEIS Draft Technical Appendices

---

We have had several requests for examples of appropriate level of detail for the CALFED resource category Technical Reports. In accordance with those requests, please find examples of what we believe are the appropriate level of detail for the CALFED Programmatic EIS/EIR Technical Reports. These examples are not intended to be used as hard and fast rules about level of detail but are examples to provide you with some guidance.

The first example is the *CVPIA PEIS Regional Economics Draft Technical Appendix.* This report provides a reasonably good (and brief) discussion of the affected environment, both a historical perspective and recent economic baseline conditions. In addition, the environmental consequences section outlines the general impacts by sector and, more specifically, by sector in each region of the study area. The report also provides a discussion of data limitations and some of the assumptions that went into the modeling and analysis.

The major area of concern that we have about the level of detail of this report relates to the level of significance of the dollar values and employment data in the summary tables. Specifically, given that the input-output data and modeling results for the economic sectors are aggregations, and given that actions discussed in the CALFED alternatives are being expressed in ranges of acres (or miles, etc.) affected, it probably makes sense, when describing the affected environment and environmental consequences, to round off data and modeling results to tens of millions of dollars and tens or hundreds of jobs. We don't want the teams to change or misrepresent existing data or original data developed for the affected environment sections of the reports but we also don't want to over-state our knowledge of the accuracy of the data. For example, in Table II-2 baseline data were aggregated to one-digit Standard Industrial Code (SIC) major groups. What is the accuracy of the data collected by the California Employment Development Department and U. S. Department of Commerce? Does it make sense to discuss existing jobs in increments of less than 10? And does the data collection support an accuracy of income increments of $1 million?

D-034190

Some of the same questions above should be asked in the context of impact analysis. Using data from Table III-9 as an example, instead of 319.9 jobs lost (under the Sacramento River Region and Impact on Direct Employment) to reduced agricultural output, it probably should be 300 jobs lost. And instead of just 300 jobs lost, it would likely be a range of 300 to 350 jobs based on the loss of---for example---30,000 to 40,000 acres of agricultural production in a particular region.

The second example of what we think is an appropriate level of detail is in the *CVPIA PEIS Draft Groundwater Technical Appendix.* Good use was made of graphs, tables, and maps to describe both the existing environment and the potential impacts of different alternatives. In general, the descriptions of historical and recent conditions and potential impacts of alternatives on groundwater storage and production, groundwater levels, land subsidence, groundwater quality, and seepage and waterlogging are well organized and to the point.

Please remember that the above examples are for guidance only. We are not suggesting that your affected environment descriptions and impact analyses have to be exactly like those described in the CVPIA PEIS Technical Appendices. But some of the information from the CVPIA PEIS Technical Appendices will be used in the CALFED Programmatic EIS/EIR Technical Reports and we want to focus your efforts on our collective goal of developing programmatic-level descriptions and analyses that are concise and that can be understood by a layperson.

Please contact me at (916) 653-9499 if you have questions or comments.

Attachments

TABLE II-2.

BASELINE DATA FOR REGIONAL MODELS

Industry	Final Demand (MM$)	Total Industry Output (MM$)	Employee Compens. Income (MM$)	Property Income (MM$)	Total Place of Work Income (MM$)	Total Value Added (MM$)	Employment (Number of Jobs)
Sacramento River Region							
Agriculture, Forestry, Fishing	1,848	2,704	316	620	936	987	57,634
Mining	746	834	62	516	578	644	1,770
Construction	8,794	9,763	2,548	797	3,346	3,399	104,602
Manufacturing	9,547	12,130	2,761	1,985	4,745	5,106	82,196
Transportation, Comm., Utilities	3,047	5,714	1,539	1,479	3,018	3,251	45,006
Wholesale, Retail Trade	8,269	9,822	5,138	1,299	6,438	7,834	264,942
Finance, Insurance, Real Estate	9,276	12,260	2,184	5,736	7,920	9,739	107,618
Services	11,585	15,148	6,718	2,830	9,548	9,748	327,237
Govt. Enterprise & Special Ind.	11,677	12,822	9,515	1,237	10,752	10,753	306,253
Total	64,787	81,196	30,782	16,499	47,281	51,461	1,297,258
Population	2,671,300						
San Joaquin River Region							
Agriculture, Forestry, Fishing	5,288	7,718	842	1,479	2,321	2,391	150,011
Mining	1,818	2,023	58	1,541	1,599	1,642	1,485
Construction	4,749	5,306	1,377	430	1,808	1,836	58,182
Manufacturing	12,888	15,511	2,809	2,100	4,909	5,311	91,092
Transportation, Comm., Utilities	2,204	3,936	1,010	877	1,887	2,038	32,599
Wholesale, Retail Trade	4,885	6,292	3,335	851	4,186	5,112	169,736
Finance, Insurance, Real Estate	4,892	6,970	1,157	3,420	4,577	5,605	59,588
Services	7,082	8,784	3,890	1,542	5,432	5,538	191,007
Govt. Enterprise & Special Ind.	4,172	4,462	3,829	235	4,065	4,065	136,515
Total	47,979	61,003	18,307	12,477	30,784	33,538	890,215
Population	1,944,100						
Tulare Lake Region							
Agriculture, Forestry, Fishing	4,181	5,316	614	1,036	1,649	1,698	108,273
Mining	2,332	2,513	180	880	1,060	1,591	3,834
Construction	2,676	3,382	832	211	1,043	1,057	34,978
Manufacturing	3,800	4,767	873	670	1,544	1,636	26,598
Transportation, Comm., Utilities	1,432	2,281	626	598	1,224	1,318	22,771
Wholesale, Retail Trade	2,287	2,910	1,542	399	1,941	2,368	80,695
Finance, Insurance, Real Estate	1,948	2,713	400	1,388	1,788	2,209	21,589
Services	2,864	3,917	1,635	744	2,379	2,430	85,401
Govt. Enterprise & Special Ind.	2,819	2,962	2,550	100	2,649	2,649	84,567
Total	24,340	30,761	9,253	6,024	15,277	16,955	468,706
Population	994,000						
North Coast Region							
Agriculture, Forestry, Fishing	474	785	103	165	268	276	15,070
Mining	296	318	29	96	125	202	714
Construction	2,221	2,453	642	201	843	856	26,153
Manufacturing	3,676	4,463	1,086	645	1,731	1,952	34,086
Transportation, Comm., Utilities	1,051	1,573	354	355	710	776	10,895
Wholesale, Retail Trade	1,975	2,396	1,251	317	1,567	1,904	66,991
Finance, Insurance, Real Estate	2,379	3,118	580	1,440	2,020	2,454	27,976
Services	2,841	3,713	1,647	683	2,330	2,386	87,025
Govt. Enterprise & Special Ind.	1,395	1,489	1,272	86	1,358	1,359	45,605
Total	16,309	20,308	6,964	3,988	10,952	12,163	314,515
Population	636,300						

TABLE III-9

REGIONAL ECONOMIC IMPACTS ON ALL SECTORS OF ALTERNATIVE 4

Region and Directly Impacted Sectors	Impacts on All Sectors					
	Employment (# of jobs)		Output ($MM)		PoW Income ($MM)	
	Direct	Total	Direct	Total	Direct	Total
Sacramento River						
Agriculture						
Reduced Output	-319.9	-1,035.1	-25.5	-69.1	-6.9	-31.2
Reduced Net Income	-60.2	-125.0	-4.1	-8.2	-2.2	-4.7
Increased Income from Water Sales	119.5	248.3	8.1	16.4	4.4	9.4
Total Agriculture	-260.7	-911.8	-21.5	-61.0	-4.7	-26.6
Recreation	22.5	42.8	0.8	2.1	0.5	1.3
M & I Water Costs	-52.3	-113.3	-3.6	-7.5	-2.0	-4.3
TOTAL	-290.5	-982.4	-24.3	-66.4	-6.2	-29.6
San Joaquin River						
Agriculture						
Reduced Output	-1,606.5	-4,340.5	-127.6	-286.3	-35.9	-122.2
Reduced Net Income	-533.0	-971.0	-34.8	-61.2	-19.3	-34.7
Increased Income from Water Sales	829.8	1,511.6	54.2	95.2	30.1	54.1
Total Agriculture	-1,309.7	-3,799.9	-108.2	-252.3	-25.2	-102.9
Recreation	29.9	50.3	1.0	2.2	0.6	1.3
M & I Water Costs	-57.4	-109.0	-3.8	-6.9	-2.1	-3.9
TOTAL	-1,337.2	-3,858.6	-111.0	-257.0	-26.6	-105.4
Tulare Lake						
Agriculture						
Reduced Output	-243.4	-677.4	-19.1	-43.0	-4.3	-16.7
Reduced Net Income	-278.1	-465.3	-17.6	-29.1	-9.6	-16.2
Increased Income from Water Sales	25.2	42.0	1.6	2.6	0.9	1.5
Total Agriculture	-496.3	-1,100.7	-35.1	-69.5	-13.0	-31.4
Recreation	1.4	2.0	0.0	0.1	0.0	0.1
M & I Water Costs	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	-494.9	-1,098.7	-35.0	-69.4	-13.0	-31.4
South & Central Coast						
M & I Water Costs	-74.9	-175.4	-5.6	-12.7	-3.0	-7.1
San Francisco Bay Area						
M & I Water Costs	-44.9	-97.6	-3.5	-7.4	-1.9	-4.2
California Total						
Agriculture						
Reduced Output	-2,169.8	-6,053.1	-172.2	-398.4	-47.1	-170.2
Reduced Net Income	-871.3	-1,561.3	-56.5	-98.6	-31.2	-55.6
Increased Income from Water Sales	974.4	1,801.9	63.9	114.2	35.4	64.9
Total Agriculture	-2,066.7	-5,812.4	-164.8	-382.8	-42.9	-160.9
Recreation	53.8	95.0	1.8	4.4	1.2	2.7
M & I Water Costs	-229.5	-495.2	-16.5	-34.5	-9.0	-19.5
TOTAL	-2,242.4	-6,212.6	-179.5	-412.9	-50.7	-177.8

NOTES:
Totals may differ from sum of elements because of rounding.

To: Rick Breitenbach
CALFED
1416 Ninth Street, Room 1155
Sacramento, CA 95814
(916) 657-2666

Programmatic Environmental Impact Statement (PEIS)
Review of Administrative Draft Documents
Date Sent: 04/04/97
Documents included in this shipment

Item No.	Document Title	Copies this Shipment	Copies Previously Sent	Total Copies Sent
	Executive Summary and PEIS			
1	Administrative Draft Executive Summary (not yet available)	0	0	0
2	Administrative Draft PEIS	0	5	5
	PEIS Development Technical Appendices			
	Alternatives Description	Incorporated into PEIS		
	Analytical Tools	Eliminated		
3	No Action Alternative	1	0	1
4	Public Involvement	1	0	1
5	Evaluation of Preliminary Alternatives	1	0	1
6	Pre CVPIA Conditions (new - not yet available)	0	0	0
	Issue Area Technical Appendices			
1	Agricultural Economics & Land Use	1	0	1
2	Air Quality	1	0	1
3	Cost Allocation	1	0	1
4	Cultural Resources	1	0	1
	Fish Habitat Water Quality	Incorporated into Fisheries		
5	Fish, Wildlife & Recreation Economics	1	0	1
6	Fisheries	1	0	1
7	Groundwater	1	0	1
8	Municipal & Industrial Land Use and Demographics	1	0	1
9	Municipal Water Costs	1	0	1
10	CVP Power	1	0	1
11	Mosquito Abatement at the Refuges	1	0	1
12	Public Health: The Delta as a Source of Drinking Water	1	0	1
13	Recreation	1	0	1
14	Regional Economics	1	0	1
15	Social Analysis	1	0	1
16	Soils & Geology	1	0	1
	Surface Water	Incorporated into Water Facilities		
	Trinity River Basin	Incorporated into PEIS		
17	Vegetation & Wildlife	1	0	1
18	Visual Resources	1	0	1

04/04/97 09:05 AM DOCCFED.WK4

19	Surface Water Supplies and Facilities Operation	1	0	1
20	Water Transfer Opportunities	1	0	1
	Indian Trust Assets	Incorporated into PEIS		
	Methodology/Modeling Technical Appendices			
	Water Facilities and Hydrologic Methodology/Modeling			
1	PROSIM	1	0	1
2	SANJASM	1	0	1
3	CVGSM	1	0	1
	Agricultural Economics			
4	CVPM	1	0	1
5	CVPTM - Water Transfer Opportunities	1	0	1
6	Recreation	1	0	1
7	Fish, Wildlife and Recreation Economics	1	0	1
8	Municipal and Industrial Water Costs	1	0	1
9	Regional Economics (IMPLAN)	1	0	1
	Fish Habitat Indices	Eliminated		
10	Fish Habitat Water Quality	1	0	1
11	Vegetation and Wildlife	1	0	1